🏋, KOLASCH & BIRCH United Str 1 ... ent Rights

ATTORNEY DOCKET NO.

230-110P

ASSIGNMENT

| | Filed_06-28-96 |
|-------------------------------|--|
| | WHEREAS, Seiji NAKAMURA (deceased), |
| | Takashi SAKURAI and |
| Insert Name(s) of Inventor(s) | Jun-ichi NEZU |
| · | |
| Insert Title | (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in GENE ENCODING ADSEVERIN |
| | |
| | for which an application for Letters Patent of the United States of America has been executed by the undersigned |
| Insert Date of Signing of | onJune 17, 1996 |
| Application | WHEREAS, CHUGAI SEIYAKU KABUSHIKI KAISHA |
| Insert Name of Assignee | |
| Insert Address of Assignee | of 5-1, Ukima 5-chome, Kita-ku, Tokyo 115 Japan |
| | its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America; |

NOW THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America and its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America and its territories, dependencies and possessions, and in and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned ce(s) to execute all papers necessary in connect. with any interference which may be declared concerning this application or continuation, division or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue any and all Letters Patents of the United States of America resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch and Birch the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U. S. Patent and Trademark Office for recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

| Date June 17, 1996 Name of Inventor NOTING Valkainal (Heir of Seiji | (SEAL) NAKAMURA) |
|---|---------------------|
| Date June 17, 1996 Name of Inventor Jakashi Sakurai Takashi SAKURAI (signature) | (SEAL) |
| Date June 17, 1996 Name of Inventor Junichi Mezu (signature) | (SEAL) |
| Date Name of Inventor (signature) | (SEAL) |
| Date, Name of Inventor(signature) | (SEAL) |

(This assignment should preferably be acknowledged before a United States Consul or Notary Public. If not, then the execution by the Inventor(s) should be witnessed by at least two other persons who sign here.)

| Witness Masamitan Honda | |
|----------------------------|--|
| Witness - Hiroko Taleamure | |
| Witness 17. | |

BIRCH TEWART, KOLASCH & BIRCHLLP

COMBINED L_CLARATION AND POWER OF ATTORNE:

ATTORNEY DOCKET NO.

230-110P(PCT)

PLEASE NOTE: YOU MUST COMPLETE THE FOLLOWING:

FOR PATENT AND DESIGN APPLICATIONS

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one

| | inventor is named below subject matter which is c |) or an original, first and joi laimed and for which a pate | nt inventor (if plural inventors are nt is sought on the invention entit | e named belov led:* | v) of the |
|---|--|---|--|---|--|
| nsert Title | GENE ENCODING | | | | |
| heck Box If | | | | | |
| ppropriate - or Use Without pecification ttached | the specification of which | n is attached hereto unless th June 28, 1996 | e following box is checked: as United | | |
| | States Application | Number 08/669,28 | | | |
| | PCT International | Application Number PC | T/JP94/02227 | | |
| | and was amended | | (| if applicable). | |
| | including the claims, as an I acknowledge the decode of Federal Regulation I do not know and before my or our invention my or our invention there use or on sale in the Unit has not been patented or in any country foreign representatives or assigns no application for patent United States of America follows. I hereby claim foreign application(s) for patent application for patent or priority is claimed: | mended by any amendment in luty to disclose information ons, §1.56. do not believe the same was on thereof, or patented or deepf, or more than one year ped States of America more to the United States of Amore than twelve months (so inventor's certificate on the prior to this application but or inventor's certificate lis inventor's certificate having | tand the contents of the above is eferred to above. Which is material to patentability is ever known or used in the Uniscribed in any printed publication or to this application, that the shan one year prior to this applicator's certificate issued before the tamerica on an application filed ix months for designs) prior to this invention has been filed in any y me or my legal representatives title 35, United States Code, §119 and below and have also identificate is filing date before that of the | as defined in ited States of in any country ame was not it ited. The ited ited ited ited ited ited ited ite | Title 37, America y before in public nvention plication ny legal and that gn to the xcept as y foreign |
| | Prior Foreign Application | on(s) | | Priority | Claimed |
| asert Priority Aformation | _ 355112/1993 | Japan | | | |
| f appropriate) | (Number) | (Country) | (Month/Day/Year Filed) | Yes | No |
| | 160236/1994 | Japan | 7/12/1994 | ₹ | Ü |
| | (Number) | (Country) | (Month/Day/Year Filed) | Yes | No |
| | 340692/1994 | _ Japan | 12/20/1994 | K | |
| | (Number) | (Country) | (Month/Day/Year Filed) | Yes | No |
| | | | | | |
| | (Number) | (Country) | (Month/Day/Year Filed) | Yes | No |
| | | | | | |
| | (Number) | (Country) | (Month/Day/Year Filed) | Yes | No |
| | I hereby claim the b application(s) listed below | | l States Code, § 119(e) of any Un | ited States pro | ovisional |
| | (Application Number) | | (Filing Date) | | |
| | (Application Number) | | (Filing Date) | | · |
| | All Foreign Applications | s, if any, for any Patent or or To The Filing Date of Thi | Inventor's Certificate Filed Mon s Application: | re Than 12 M | |

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Number)

(Filing Date)

(Status - patented, pending, abandoned)

I hereby appoor the following attorneys to prosecute the population and/or an international application based on this application and to transact all business in the Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the attorneys identified below, unless the inventor(s) or assignee provides said attorneys with a written notice to the contrary:

RAYMOND C. STEWART (Reg. No. 21,066) JOSEPH A. KOLASCH (Reg. No. 22,463) JAMES M. SLATTERY (Reg. No. 28,380)

CHARLES GORENSTEIN (Reg. No. 29,271) LEONARD R. SVENSSON (Reg. No. 30,330) MARC S. WEINER (Reg. No. 32,181) JOE McKINNEY MUNCY (Reg. No. 32,334) C. JOSEPH FARACI (Reg. No. 32,350) TERRELL C. BIRCH (Reg. No. 19,382)
ANTHONY L. BIRCH (Reg. No. 26,122)
BERNARD L. SWEENEY (Reg. No. 24,448)
MICHAEL K. MUTTER (Reg. No. 29,680)
GERALD M. MURPHY, JR. (Reg. No. 28,977)
TERRY L. CLARK (Reg. No. 32,644)
ANDREW D. MEIKLE (Reg. No. 32,868)
ANDREW F. REISH (Reg. No. 33,443)

EASE NOTE: U MUST MPLETE THE LLOWING: Send Correspondence to: BIRCH, STEWART, KOLASCH AND BIRCH, LLP

P.O. Box 747

Falls Church, Virginia 22040-0747

Telephone: (703) 205-8000

Facsimile: (703) 205-8050

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| GIVEN NAME FAMILY NAME | INVENTOR'S SIGNATU | | DATE* |
|--|-----------------------------------|-------------|-----------------|
| Noriko NAKAMURA/executing as legal representative of decease | ed Works Naka | Musse | August 7, |
| inventor Seiji Nakamura and as | ed for 1-0 (partor | 11/11 | 1997 |
| guardian of minor children Tome | oki | | |
| Nakamura and Tamaki Nakamura, | | | |
| heirs of deceased inventor | | | |
| Seiji Nakamura | | | |
| Residence (City, State & Country) | | CITIZENSHIP | |
| Chiba-ken 270-01, Japan | | Japanese | |
| POST OFFICE ADDRESS (Complete Street Address including | ng City, State & Country) 1 | -8-205, Edd | ogawadai |
| Nishi, Nagareyama-shi, Chib | a-ken 270-01, | Japan | |
| GIVEN NAME FAMILY NAME IN | IVENTOR'S SIGNATURE | | DATE* |
| Takashi SAKURAI | | | |
| Residence (City, State & Country) | | CITIZENSHIP | |
| Tokyo 113, Japan | | Japanese | |
| POST OFFICE ADDRESS (Complete Street Address including | ng City, State & Country) | | |
| 5-10-603, Hongo 4-chome, Bu | nkyo-ku, Tokyo | 113, Japan | n |
| GIVEN NAME FAMILY NAME IN | VENTOR'S SIGNATURE | | DATE* |
| Juni-ichi NEZU | | | |
| Residence (City, State & Country) | | CITIZENSHIP | |
| Tokyo 104, Japan | | Japanese | |
| POST OFFICE ADDRESS (Complete Street Address including | ng City, State & Country) $_{C}/$ | o Chugai Se | eiyaku |
| Kabushiki Kaisha, 1-9, Kyob | ashi 2-chome, | Chuo-ku, To | okyo 104, Japan |
| GIVEN NAME FAMILY NAME IN | VENTOR'S SIGNATURE | | DATE* |
| | | | |
| Residence (City, State & Country) | • | CITIZENSHIP | |
| | | | |
| POST OFFICE ADDRESS (Complete Street Address including | ng City, State & Country) | | |
| | | | |

PLEASE NOTE: YOU MUST COMPLETE THE

COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT AND DESIGN APPLICATIONS

ATTORNEY DOCKET NO.

FOLLOWING:

Insert Title

Check Box If Appropriate -For Use Without Specification Attached

230-110P

| the specification of which is attached hereto unle | ess one of the following boxes is checked |
|--|---|
| The Specification was filed on | _ |
| Serial No and was amend | ded on |
| was filed as PCT international application | n numberPCT/JP94/02227 on |
| Dec. 27, 1994 and was amended under | er PCT Article 19 on |
| (if applicable). | |

As a below named inventor, I hereby declare that: my residence post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: * GENE ENCODING ADSEVERIN

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof, or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (six months for designs) prior to this application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows:

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below:

| Prior Foreign Application(| s) | | Priority | Claimed |
|----------------------------|---------------------------|---|--------------|----------|
| 355112/1993 | Japan | 12/28/1993 | ⊠. | |
| (Number) | (Country) | (Month/Day/Year Filed) | Yes | No |
| 160236/1994 | Japan | 7/12/1994 | [X] | |
| (Number) | (Country) | (Month/Day/Year Filed) | Yes | No |
| 340692/1994 | Japan | 12/20/1994 | × | |
| (Number) | (Country) | (Month/Day/Year Filed) | Yes | No No |
| (Number) | (Country) | (Month/Day/Year Filed) | ☐ Yes | □ No |
| (Number) | (Country) | (Month/Day/Year Filed) | ☐ Yes | □ No |
| | | or Inventor's Certificate File ling Date of This Application | | han 12 |
| Country | Application | n No. Date of Filin | g (Month/ Da | y/Year) |
| | | | | |
| I haraby plain that | hanefit under Title 25. I | United States Code \$120 S | *** | 1.0. |

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| (Application Serial No.) | (Filing Date) | (Status - patented, pending, abandoned) |
|--------------------------|---------------|---|
| (Application Serial No.) | (Filing Date) | (Status — patented, pending, abandoned) |

Insert Priority Information (if appropriate) I hereby: must the following attorneys to prosecut is application and for an international application based on this application and to transact all outsiness in the Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the attorneys identified below, unless the inventor(s) or assignee provides said attorneys with a written notice to the contrary:

RAYMOND C. STEWART (Reg. No. 21,066) JOSEPH A. KOLASCH (Reg. No. 22,463) JAMES M. SLATTERY (Reg. No. 28,380) DONALD C. KOLASCH (Reg. No. 23,038) CHARLES GORENSTEIN (Reg. No. 29,271) LEONARD R. SVENSSON (Reg. No. 30,330) MARC S. WEINER (Reg. No. 32,181)

TERRELL C. BIRCH (Reg. No. 19,382)
ANTHONY L. BIRCH (Reg. No. 26,122)
BERNARD L. SWEENEY (Reg. No. 24,448)
MICHAEL K. MUTTER (Reg. No. 29,680)
GERALD M. MURPHY, JR. (Reg. No. 28,977)
TERRY L. CLARK (Reg. No. 32,644)
ANDREW D. MEIKLE (Reg. No. 32,868)

PLEASE NOTE: YOU MUST
COMPLETE THE
FOLLOWING:

Send Correspondence to: BIRCH, STEWART, KOLASCH AND BIRCH

P.O. Box 747

Falls Church, Virginia 22040-0747 Telephone: (703) 205-8000 Facsimile: (703) 205-8050

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full Name of First or Sole Inventor: Insert Name of Inventor Insert Date This | GIVEN NAME Noriko | FAMILY NAME NAKAMURA ≥iji NAKAMURA) | INVENTOR'S SIGNATURE | e | June 17, |
|--|---|--|-----------------------|-------------|------------------|
| Document Is Signed Insert Residence | RESIDENCE (City, State | | | | 1996 |
| Insert Citizenship | 1 | 270-01 Japan | | Japanese | |
| insert Post Office Address | POST OFFICE ADDRE 1-8-205, I 270-01 Jap | SS (Complete Street Address Including C Edogawadai NISNI Dan | i, Någareyama-sh | i, Chiba-ke | n |
| Full Name of Second | GIVEN NAME | FAMILY NAME | INVENTOR'S SIGNATURE | | DATE |
| Inventor, if any: see above | Takashi | SAKURAI | Takashi Sakurai | • | June 17, 1996 |
| • | RESIDENCE (City State & | Country) | | CITIZENSHIP | |
| | Tokyo 113 | Japan | | Japanese | |
| | POST OFFICE ADDRES | SS (Complete Street Address including C | ity, State & Country) | | |
| | | Hongo 4-chome, | Bunkyo-ku, Toky | o 113 Japan | |
| Full Name of Third Inventor, If any: | GIVEN NAME | FAMILY NAME | INVENTOR'S SIGNATURE | | DATE |
| see above | Juni-ichi | NEZU | Junichi Ne | 311 | June 17, 1996 |
| | RESIDENCE (City State & | | | CITIZENSHIP | |
| | Tokyo 104 | Japan | | Japanese | |
| | | SS (Complete Street Address including C L Selyaku kabush | | -9, Kyobash | i |
| | | Chuo-ku, Tokyo 1 | Y | | |
| Full Name of Fourth Inventor, if any: | GIVEN NAME | FAMILY NAME | INVENTOR'S SIGNATURE | | DATE |
| see above | | | <u> </u> | | |
| | RESIDENCE (City, State & | & Country) | | CITIZENSHIP | |
| | POST OFFICE ADDRESS (Complete Street Address including City, State & Country) | | | | |
| į | | | | | |
| Full Name of Fifth Inventor, If any: | GIVEN NAME | FAMILY NAME | INVENTOR'S SIGNATURE | | 'DATE |
| see above | | | | | • |
| | RESIDENCE (City State & | 3 Country) | | CITIZENSHIP | |
| *Note: Must be completed | i | • | İ | | |
| - date this document is signed. | POST OFFICE ADDRES | \$2 (62-100 \$100 \$100 \$100 \$100 \$100 \$100 \$100 | | | |
| Page 2 of 2 | FOST OFFICE ADDRES | SS (Complete Street Address including C | ary State & Country) | | |
| (USPTO Approved 3-90) | | | | | |
| (Revised 7-93) | | | | | |